Decision Near on Cleanup of Unexploded Ordnance at Fort Ord

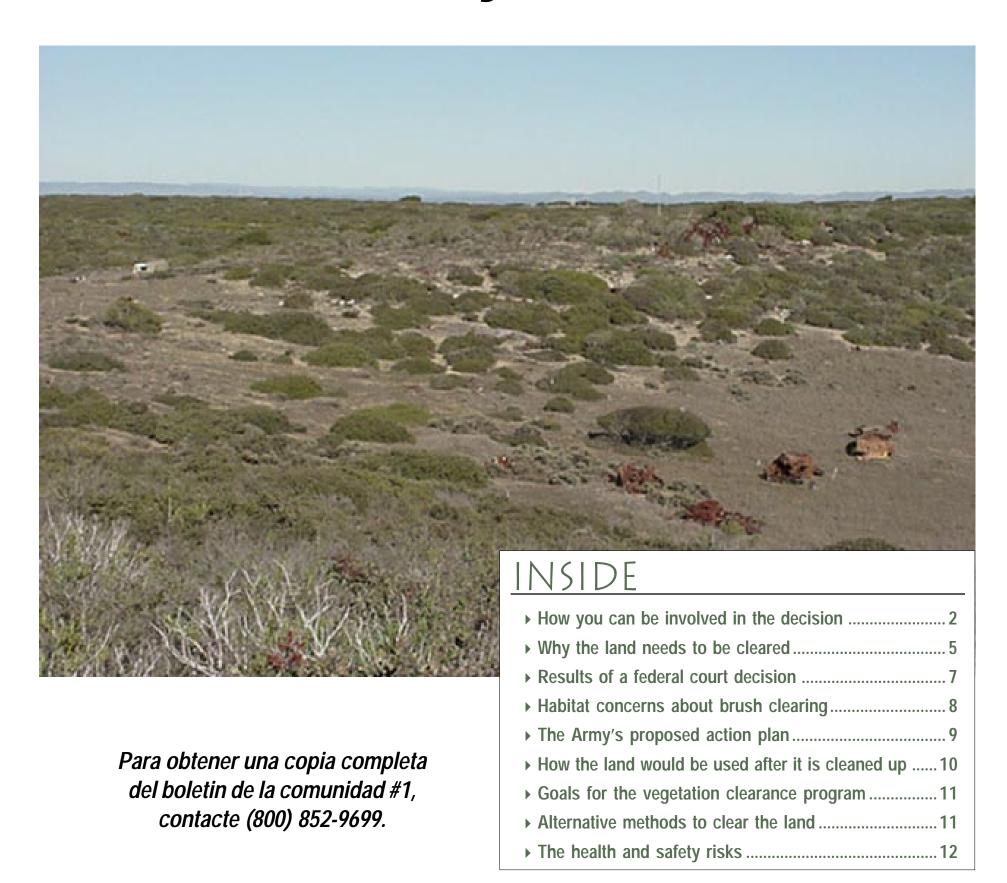


Directorate of Environmental and Natural Resources Management

August 2001

Prescribed Burns May Be Needed to Protect Public, Cleanup Workers and Rare Habitat

Community Bulletin #1



Capsule Summary

- The former Fort Ord includes areas where there is ordnance and explosives remaining on the land left over from when Fort Ord was used for training soldiers.
- ▶ The Army must clean up these areas and remove the explosive threats before the land can be safely reused by the community.
- ▶ The parcels with the highest priority for cleanup are known as Ranges 43-48, OE-16, Range 30A, several former firing ranges adjoining Seaside and York School, and the area known as Parker Flats.
- ▶ Thick stands of brush make it difficult to see any unexploded ordnance on the ground. The Army explosive safety experts have concluded that on Ranges 43-48, OE-16, Range 30A, and Seaside 1-4 it is unsafe to try to remove the high explosive items until the brush is removed.
- ▶ In the past the Army removed brush using a variety of techniques including prescribed burns, but the Army voluntarily stopped burning in 1998 to address concerns raised by regulatory agencies and community members.
- burns are necessary to clear brush at some of the sites, since highly explosive items cannot be safely removed unless the vegetation is first burned so workers can see the ground where they are working. Other vegetation clearance methods may be possible at sites where the explosives are not as sensitive or dangerous.
- Some nearby residents with respiratory conditions and other concerns oppose burns and fear that the smoke contains dangerous chemicals.
- A federal court recently ruled in a lawsuit brought by the Monterey Bay Unified Air Pollution Control District. The Court concluded that the Air Pollution Control District does not have jurisdiction over prescribed burns at Fort Ord. The court also ruled that the Army must complete more extensive environmental studies before making a decision about using prescribed burns for vegetation clearance.

The text that follows provides more detailed information on these summary topics.

Brush Must Be Cleared To Protect Workers During Cleanup

In the Spring of 2002, the U.S. Army (Army) will make a decision about how to clear vegetation from selected parcels of land at Fort Ord. Clearing the vegetation is the first step in removing high explosive ordnance items including rifle grenades and antitank rockets at or near the surface of this land. The vegetation must be cleared so explosives removal workers can see the ground to avoid accidentally setting off explosives while they are working.

This decision will be made in consultation with the U.S. Environmental Protection Agency (EPA) and the California Department of Toxic Substances Control (DTSC). These regulatory agencies review the Army's ordnance and explosives cleanup program under the provisions of federal Superfund law. These agencies have the responsibility to protect human health and safety, and the air, water and natural resources at Fort Ord.

The Army has identified those parcels of land where there is the greatest risk of an accident involving people who trespass. These include parcels known as Ranges 43-48, OE-16, and Range 30A; several former firing ranges adjoining Seaside (known as Seaside 1-4) and York School; and the area known as Parker Flats that is criss-crossed by paths or roads from which the public can enter the property. EPA and DTSC agree with the Army that it is important to clean up these high priority areas.

Following the cleanup, the land can be safely reused by the community, although restrictions will be placed on the types of uses permitted. Much of the land the Army is proposing to clean up as part of this decision will be habitat area, providing recreation opportunities and wildlife protection, but some lands are slated for economic development activities such as housing.

On some of these parcels the brush can be cleared by hand or using mechanical means. But on some of these parcels that may be difficult, maybe impossible. So the Army is studying how the brush can be cleared on these parcels, and will be making a decision in 2002.

The decision is controversial. One of the alternatives being considered—and it is the alternative the Army believes is the only possible method for at least some of the parcels—is the use of prescribed burns, carefully planned controlled fires that burn off the brush so the cleanup workers can see what they are doing. Some Fort Ord neighbors and community members object strongly to the use of prescribed burns because they are concerned about health effects from exposure to smoke and risks that fires could get out of control. Other community members and neighbors are concerned that the Army has delayed this long in cleaning up these ranges, and urge immediate cleanup to ensure no one is killed or harmed.

This decision will be made only after an extensive community outreach program and opportunities for the public to comment upon the decision.

The Army and the regulatory agencies involved in the Fort Ord cleanup invite the people of the Monterey Peninsula/Salinas Valley to evaluate the facts over the next several months, and then make comments to the agencies before a final decision is made. This bulletin describes how you can be involved in the decision and presents a summary of the problem, what alternatives are being considered and the effectiveness of the alternatives. It also begins a discussion of the health and safety risks associated with each alternative.

How You Can Be Involved

The following two pages explain your opportunities to participate in this decision.

This bulletin is the first of four that you will be receiving by mail. The contents of the bulletins will be reviewed by a number of agencies in an effort to make them as objective as possible. This bulletin describes the reasons why the land must be cleared, the alternative methods of clearing vegetation, and begins a discussion of the health and safety risks associated with each approach. If these topics are of interest to you, please consider attending a symposium on September 19th at 1:00 p.m. at the Steinbeck Forum, Monterey Conference Center, at which technical experts representing a variety of viewpoints will discuss these same issues. There is no cost to attend the symposium, but you are asked to register to attend (see page 14).

In a few months you will receive a second bulletin. This bulletin will summarize the findings of a major environmental document called an Interim Action Remedial Investigation/Feasilibity Study (IA RI/FS) that evaluates the effectiveness and impacts associated with each of the alternative clearance methods.

Late in 2001, there will be a second symposium at which technical experts will discuss the findings in the Interim Action Remedial Investigation/
Feasibility Study. Since prescribed burns are one of the alternatives being considered, this forum will include a discussion of how a burn would be conducted (*if* prescribed burns were used), and what is known about the health effects associated with prescribed burns at Fort Ord. There will also be a discussion of a relocation assistance program for people who decide to move out of the area

during the 2-3 days when smoke from burns could be in the air (again, if burns are to be used). The Army will pay reasonable relocation expenses for those who wish to relocate temporarily.

In Spring 2002, the Army will publish its proposed plan. This plan will outline exactly how the Army proposes to clear vegetation on each of the sites. The plan will also describe the methods that will be used to detect buried ordnance and explosives, the manner in which unexploded ordnance and explosives will be handled, and the quality assurance program that outlines the Army's efforts to ensure the ordnance and explosives are located.

The Army will publish a third community bulletin that will provide a summary of the Army's proposed plan. The Army will also announce

opportunities for the public to comment on the plan. Public meetings will be held at several locations throughout the area.

Following the public meetings and careful consideration of the public comments, the agencies will make a final decision. The Army will publish a document known as a Record of Decision that will describe the Army's decision and discuss the Army's response to the public's comments.

The Army's decision will also be announced in Community Bulletin #4, which will also discuss a timetable for cleanup, as well as what impacts could occur and any programs to minimize these impacts.

Community Outreach Schedule

Fort Ord Vegetation Clearance Alternatives

AUGUST 2001

Community Bulletin #1



SEPTEMBER 2001

Symposium #1



OCTOBER 2001

Community Bulletin #2 Draft IA RI/FS Released





NOVEMBER 2001

Symposium #2



FEBRUARY 2002

IA RI/FS Proposed Plan is Released



MARCH 2002

Community Bulletin #3 **Public Comment Meetings**





JULY 2002

Community Bulletin #4 Record of Decision Signed





Symposia Topics

SYMPOSIUM #1

September 19, 2001 • 1:00 - 5:00 pm

Steinbeck Forum

Monterey Conference Center

- > The need for vegetation clearance
- Safety risks to the public from unexploded ordnance and explosives (UXO)
- Future uses of Fort Ord land
- ▶ The Habitat Management Plan
- ▶ Criteria for a successful vegetation clearance program
- Alternative methods of vegetation clearance
- Health and safety risks to cleanup workers

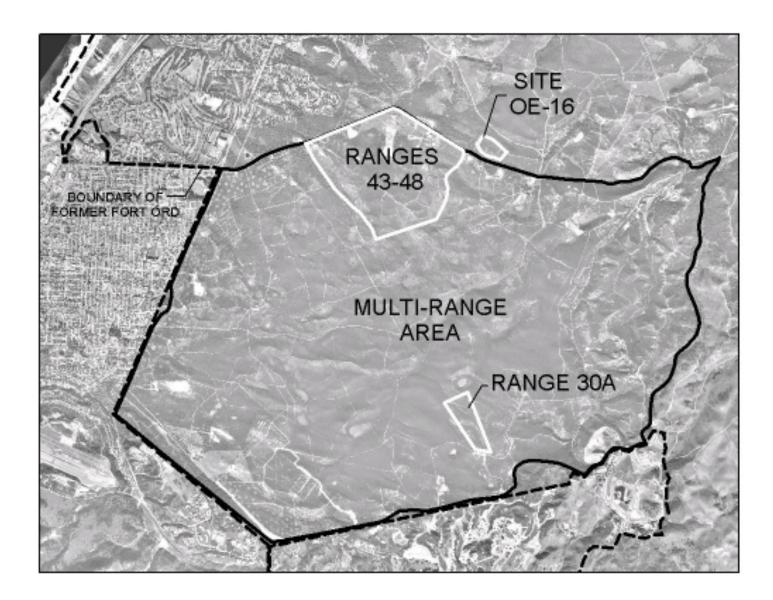
SYMPOSIUM #2

November 14, 2001 • 1:00 - 5:00 pm

Steinbeck Forum

Monterey Conference Center

- ▶ How effective is each alternative in meeting the vegetation clearance goals?
- What are the impacts upon the public from each alternative?
- If prescribed burns were used, when and how would burns be conducted?
- Are there added risks from prescribed burns on lands where there is UXO?
- Are there health risks to nearby residents?
- What has been done in other communities to protect or temporarily relocate residents?
- How would a relocation program at Fort Ord work?



Why Does This Land Need To Be Cleared?

From 1917 until 1994, Fort Ord served as a training and staging area for the U.S. Army. Soldiers who trained at Fort Ord fought in World War I, World War II, Korea, Vietnam, and Desert Storm. During those years of training, soldiers fired millions of rounds of small arms ammunition. They also fired grenades, mortars, rockets and artillery. These items are generally referred to by the term "ordnance and explosives." Inevitably, a small percentage of this ordnance and explosives didn't detonate when it was fired and could still explode if disturbed by someone digging it up or even walking over it.

Since 1994 the Army has spent millions of dollars investigating those places on Fort Ord where unexploded ordnance and explosives could still be, and cleaning it up. There are many places at Fort Ord where there is no history of ordnance and explosives use, such as the residences and office buildings used by the soldiers, the golf courses, and some tracts of open land. In fact, many of these areas have already been transferred to community organizations such as California State University Monterey Bay and the University of California. Other areas have been systematically cleaned up, and have been transferred to community organizations or local governments for use as parks, or for economic development.

However, there are still areas the Army needs to clean up. The areas with the highest priority for cleanup are shown on the map. They are the Army's top priority because: (1) the ordnance and explosives present at or near the surface of these ranges are highly explosive and so sensitive that they can be detonated at the slightest disturbance, (2) they are near residential areas and schools, or (3) they are accessible, so the temptation to trespass is high.

Naturally, the Army has a fence preventing access to these ranges, along with warning signs and police patrols. However, fences do not always stop children. Recently, children from Fitch Middle School

trespassed onto Ranges 43-48 and collected a number of "inert practice" rifle grenades that are present on the surface. The practice grenades are nonexplosive, and release a colored dye upon impact. The children were later found throwing them against a concrete wall trying to get them to explode. Miraculously, they had only collected practice grenades in spite of the fact that high explosive rifle grenades are also present on the surface of these ranges. The children could have been killed or seriously injured if they had disturbed even one of the highly explosive rifle grenades.

Recently the Army installed new concertina wire behind the existing 4-strand barbed-wire fence along the front of these ranges to further dissuade trespassing. However, fences are less than 100% effective at keeping people out of restricted areas. Experience shows that some people, particularly children, think a fence is simply a challenge. The Army believes that the unexploded ordnance must be quickly removed to prevent an accident involving people that choose to trespass. The regulatory agencies also want the land to be cleaned up as soon as possible.

These highly explosive items also pose significant safety challenges to the ordnance and explosives professionals who have been hired and trained to remove them. Cleaning up unexploded ordnance and explosives is a dangerous job even under the best circumstances, but it is particularly dangerous if workers can't see the ground where they are walking.

The lands rated as high priority for cleanup are covered with thick vegetation that makes it impossible for workers to see the ground and the high explosive items hidden by the brush. Consequently, the Army's explosive safety experts have determined that the ordnance and explosives cannot be safely removed until the vegetation is thoroughly cleared.



This photo of a back road on Fort Ord gives you an idea of how tall and thick the brush grows.



The thick vegetation on the former Fort Ord can hide unexploded ordnance that can be found after the vegetation is burned.

The photos above show the problem. In the first photo, you can see how tall the brush grows in the range area. In the second photo the brush has been burned and you are able to see an artillery round laying on the surface. The ordnance and explosives workers require this kind of view before it is safe to do cleanup work. Without vegetation clearance, workers would not even be able to see this large shell. Some of the high explosive ordnance on the surface of these ranges are much smaller and more difficult to see. The ordnance and explosives workers cannot safely walk the land unless they have a clear, unobstructed view of the ground. For the safety of its workers, the Army must clear the brush before it is safe for cleanup to occur.

In the past, the Army has cleared brush with a variety of methods including starting carefully planned controlled fires that burn the brush down to the ground, as shown in the second picture above. Inevitably, this has created smoke that has blown over surrounding communities. Some people who are very sensitive to smoke believe that smoke from Fort Ord's fires caused them serious health problems. They also worry that burning on land where there is unexploded ordnance and explosives could put chemicals into the air and soil that are more harmful than those associated with normal brush fires.

The Army has done a number of studies on what chemicals are put into the air by detonation of various ordnance and explosives items when there is a prescribed burn. These studies indicate that the chemicals released from ordnance or explosives that may detonate during prescribed burns do not pose a significant threat to the public's health or the environment beyond that which would occur with fire on any comparable land.

Some community members have criticized the Army's studies because the measurements used in the studies were made during fires at other Army installations. The Army has not measured constituents in the air during a fire at Fort Ord.

Even though the smoke produced from burning vegetation at Fort Ord is expected to be no different than smoke generated by other prescribed burns (or wildfires) throughout the county and state every year, smoke can cause problems for people who have respiratory problems, such as asthma, no matter what the source of the smoke. So, if there are prescribed burns in the future, the Army will pay for temporary relocation during prescribed burns for any local residents who believe the burns could affect their health.

For more than two years, the Army has not performed any prescribed burns. Instead, the Army has removed ordnance and explosives from those areas of Fort Ord where the brush could be cleared by hand or mechanical means. Now those areas are largely cleaned up. If the Army is going to clean up the rest of the land, the problem of vegetation clearance—and the possibility of prescribed burns—has to be addressed again.

Recently there have been two important developments that affect the Army's approach to cleanup. These developments were:

- ▶ In March 2001, a federal judge ruled in a lawsuit between the Army and the Monterey Bay Unified Air Pollution Control District over jurisdiction of prescribed burns of vegetation on lands being readied for cleanup.
- ▶ The U.S. Fish & Wildlife Service (FWS) has issued a letter to the Army stating that no further land transfers can take place until prescribed burns agreed to in a Habitat Management Plan take place or the Army enters into formal consultation with the FWS to modify the Habitat Management Plan.

Both of these events had important implications for how the Army proceeds with management of its ordnance and explosives cleanup program. The Army has been consulting with the two environmental regulators, the U.S. Environmental Protection Agency (EPA) and the California Department of Toxic Substances Control (DTSC), to determine how to proceed.

Federal Court Decision Requires Additional Studies Before Decision About Prescribed Burns

In 1998, the Monterey Bay Unified Air Pollution Control District filed a lawsuit against the Army. In that lawsuit the Air Pollution Control District claimed jurisdiction over prescribed burns (planned burn-offs of vegetation that permit workers to see ordnance laying on the ground).

In response to the lawsuit and regulatory concerns expressed by EPA and DTSC, the Army voluntarily halted the prescribed burn program. The Army has since concentrated on cleaning up those lands where hand or mechanical clearing of vegetation was possible and it was safe for ordnance and explosives removal specialists to work. However, cleanup

is now completed on most of the areas where hand or mechanical clearing is possible.

In March 2001, the federal court ruled that the Monterey Bay Unified Air Pollution Control District did not have jurisdiction over prescribed burns at Fort Ord. But the court did rule that the Army had to prepare more detailed environmental documents before it could make a decision to use prescribed burns.

The Army has concluded that under the court decision:

▶ For those sites where prescribed burns are one of the alternatives being considered, vegetation clearance alternatives must be evaluated using the procedural requirements of a *Remedial Response* (see box below). That means the Army must prepare a Remedial Investigation/Feasibility Study before a decision can be made on the best way to clear vegetation.

- ▶ The Army may proceed with Removal Actions in areas of high threat if prescribed burning is not required, such as areas where vegetation can be cut by hand or mechanical means without endangering cleanup workers.
- ▶ In high risk areas, the Army may also remove ordnance and explosives on the surface of the ground in open areas such as paths, fire breaks, or areas where there is no vegetation.

What's the Difference Between a "Removal Action" and a "Remedial Response?"

- ▶ Under the federal law that governs environmental cleanup, agencies can take two kinds of actions. If the agency believes there is an imminent threat to human or environmental health and safety, the agency may engage in a *Removal Action* to immediately remove the threat. On the other hand, if the threat of a release of hazardous substances is serious but not an immediate threat to public health, then the agency makes a *Remedial Response*.
- ▶ To complete a Remedial Response, the agency must first conduct a Remedial Investigation/Feasibility Study and sign a Record of Decision. The purpose of the Remedial Investigation/Feasibility Study is to ensure that the agency has carefully considered all the alternatives so that once it takes remedial action, the problem is genuinely solved. The Remedial Investigation/Feasibility Study also reconsiders all previous Removal Actions, ensuring that emergency or time-critical removal actions were complete, and evaluating whether additional cleanup is necessary. The Record of Decision describes the decision the agency has made, documents the issues raised by the public and how the agency addressed those issues, and explains why the agency made the decision it made.

Capsule Summary

- ▶ When Central Maritime Chaparral is cleared by fire, it is actually good for the natural habitat. When it is cleared by hand or mechanical means, this rare habitat doesn't fully recover.
- ▶ The Army has identified more than 8,000 acres of land covered by maritime chaparral (a rare habitat) where there may be unexploded ordnance and explosives that must be cleaned up.
- Approximately 85% of the worldwide distribution of several rare and endangered plants that exist only in Central Maritime Chaparral habitat is on the former Fort Ord. As a result, the management of this land is overseen by the U.S. Fish & Wildlife Service, the federal agency responsible by law for protecting rare and endangered species.
- ▶ Since 1997, the Army and Fish & Wildlife Service have had an agreement to use prescribed burns as the primary method for brush clearance on lands designated as habitat reserves and containing Central Maritime Chaparral.
- ▶ The Army and the Fish & Wildlife Service have agreed that until the prescribed burn issue is resolved, no further cutting of maritime chaparral will occur without Fish & Wildlife Service approval and no additional land transfers will be permitted.

The text that follows provides more detailed information on these summary topics.

What Does The U.S. Fish & Wildlife Service Say About Brush Clearing?

Is clearing the brush off the land good for the natural habitat, the plants and animals that live on that land? Most people would guess it is not. But the answer depends on the type of plants and how the clearing is done. For certain types of plants, including some important habitat types at Fort Ord, if the brush is cleared by cutting the habitat will not grow back as healthy or diverse as before. If the brush is cleared by burning, the habitat not only recovers but flourishes. In fact, after a fire a much greater diversity of native plants grows on the land. For example, the year after a fire the land is likely to be covered with wild flowers that haven't been seen for many years. In coastal California's dry Mediterranean climate, occasional brush fires are inevitable even without humans throwing burning cigarettes out of cars or starting foolish campfires. Many fires are started, for example, by lightning. Those plants and animals that have survived are those that are adapted to a cycle of occasional fire.

One of the key habitat types at Fort Ord is called Central Maritime Chaparral. Maritime chaparral has evolved with fire being a critical part of its natural life cycle. This plant community—and the animal species that dwell in it—are dependent on fire to recycle the nutrients, expose the mineral soil and stimulate germination of the seeds in the soil that have accumulated since the last fire. This natural succession allows the plant community to rejuvenate itself and enhances the natural diversity of this rare and unique habitat.

Central Maritime Chaparral is an extremely rare plant community. Approximately 85% of the worldwide distribution of several rare and endangered plants in maritime chaparral habitat exists on Fort Ord. Because they are rare and endangered, they are protected by law. The U.S. Fish & Wildlife Service is the federal agency responsible for enforcing this law—the Endangered Species Act.

In 1997, the Army and many other entities (such as the U.S. Bureau of Land Management, Fort Ord Reuse Authority, Monterey County, City of Marina, etc.) signed a Habitat Management Plan (HMP) with the Fish & Wildlife Service to protect rare and endangered species and their habitats at the former Fort Ord and to allow the development of other areas. The Fish & Wildlife Service determined that the Habitat Management Plan will protect maritime chaparral if the Army and other future land managers are able to conduct prescribed burns. Based on this agreement, the Fish & Wildlife Service also determined that it would

not be necessary to add several plants that exist at Fort Ord to the Federal endangered species list, under the Endangered Species Act. Also, because so much of this habitat on federal land is being protected, Fish & Wildlife Service won't have to place constraints on private landowners in Monterey County where this habitat also exists.

The Army has identified 8,150 acres of land covered by maritime chaparral where there is suspected unexploded ordnance and explosives. Of this, approximately 6,600 acres are designated as future habitat reserves that will be managed by the U.S. Bureau of Land Management. Under the terms of the Habitat Management Plan, the Army is supposed to use prescribed burns as the primary method of brush clearance in designated habitat reserves containing Central Maritime Chaparral. The Habitat Management Plan limits the burning of Central Maritime Chaparral in designated habitat reserves to no more than 800 acres a year.

When the Army halted the prescribed burn program, following a lawsuit by the Monterey Bay Unified Air Pollution Control District coupled with regulatory concerns expressed by EPA and DTSC, the Fish & Wildlife Service became increasingly concerned. The Habitat Management Plan cannot be implemented without prescribed burns. If prescribed burns don't occur in designated habitat areas, the Army and the Fish & Wildlife Service will need to revisit the entire plan to protect the maritime chaparral habitat. This could impact which lands are available for future reuse by the community.

As a result of its growing concern, the Fish & Wildlife Service sent a letter to the Army stating that no further land transfers could take place until the prescribed burns outlined in the Habitat Management Plan occur or the Army enters into formal consultation with the USFWS to modify the Habitat Management Plan. In December 2000, an agreement was reached between the agencies allowing some final transfers of parcels. Until the prescribed burn issue is resolved, no further cutting of maritime chaparral will occur without Fish & Wildlife Service approval and no additional land transfers will be permitted. Resolving the prescribed burn issue becomes essential if the Army is to continue with its removal of unexploded ordnance and explosives and if any additional land is to be transferred to the community.

The Army's Plan Of Action

As a result of the recent Federal court decision, the Army must complete a Remedial Investigation/Feasibility Study—an evaluation of alternatives—and sign a Record of Decision before it can proceed with vegetation clearance. In 1999, the Army began a Remedial Investigation/Feasibility Study that will cover the ordnance and explosives cleanup program for the entire base. But this study will not be complete until 2005 at the earliest.

The Army has identified a course of action that will speed up the process as much as possible in order to protect the public, while still complying with all laws and environmental regulations. This plan of action includes the following:

Prepare a tightly focused <u>Interim</u>
 <u>Action</u> Remedial Investigation/
 Feasibility Study concentrating on the highest risk areas

Rather than halt all cleanup until the basewide Remedial Investigation/Feasibility Study is completed, the Army has decided to prepare an Interim Action Remedial Investigation/ Feasibility Study. By focusing this study on just those areas that are the highest priority for cleanup rather than the entire base, the Army hopes to complete the study early in 2002, with a decision mid-2002. Because of the work that has already been going on as part of the larger base-wide Remedial Investigation/Feasibility Study, many of the studies that are needed to make a decision about these specific areas are not only underway but nearing completion. Meanwhile the Army will continue with the longer-term study.

The U.S. Environmental Protection Agency and the California Department of Toxic Substances Control, the environmental regulators for this project, support the decision to produce an Interim Action Remedial Investigation/Feasibility Study.

The Interim Action Remedial Investigation/Feasibility Study will evaluate alternative vegetation clearance methods, including prescribed burns, on three parcels of land known as Ranges 43-48 (former firing ranges) OE-16, and Range 30A. These three sites are all fenced, but the Army still considers them high hazard areas because of the types of explosives on them and their proximity to residences or schools, or access from roads or paths.

In addition, these three sites are within the areas identified for prescribed burns in the Habitat Management Plan and the Army has concluded that the types of explosives on them are sufficiently hazardous that hand or mechanical cutting could be too dangerous for cleanup workers.

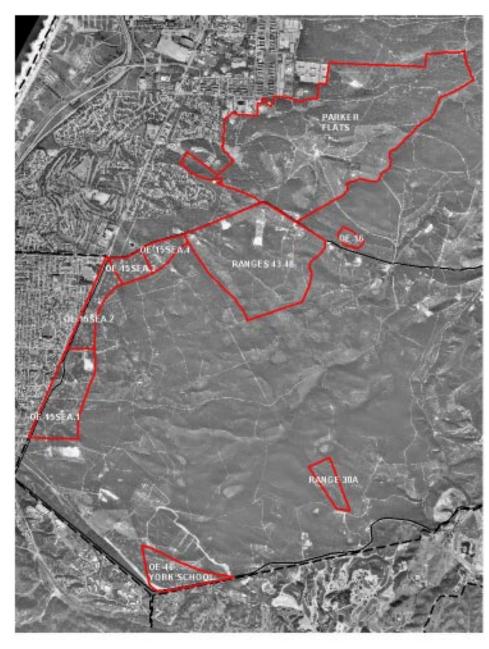
Proceed with immediate cleanup of sites where the Army can rule out prescribed burns as the vegetation clearance method

The Army has initiated discussions with the Fish & Wildlife service that the Army hopes will result in an agreement to proceed with immediate vegetation clearance and cleanup of Seaside 1-4, Parker Flats, and York School. The Army has concluded it can rule out prescribed burns as the vegetation clearance method on these sites. The Habitat Management Plan permits hand or mechanical clearing at these sites because these lands will ultimately be developed and would not remain as habitat. Since prescribed burns can be ruled out as a possibility, the Army does not need to consider these sites in the Interim Action Remedial Investigation/Feasibility Study.

 Proceed with surface clearance of high hazard sites until the fullprogram Remedial Investigation/ Feasibility Study is completed

Finally, the Army will proceed with surface clearing on those high-risk sites where it cannot do a complete cleanup. This means that these sites will be cleared of visible ordnance in areas adjoining paths or firebreaks, or in areas where there is minimal vegetation and workers can see the ground where they are working. Only ordnance and explosives that can be easily detected near the surface will be cleaned-up. A full cleanup program removes all ordnance and explosives to a depth of four feet below ground surface. Since the Army is only removing the ordnance that is visible and easily accessible, full cleanup will be required in the future.

The Army takes very seriously its responsibility to protect the public from safety or health risks. However, it must implement its programs within the confines of legal constraints and regulatory requirements while also attempting to address community concerns. The program outlined above is designed to satisfy all these requirements, while at the same time get the cleanup job done as expeditiously as possible.



How Would the Land Be Used After It Is Cleaned Up?

When Fort Ord closed in 1994, the Monterey Peninsula lost an estimated 5,000 jobs. One way that community leaders—and Congress—hoped to reduce the impact was to develop the former Fort Ord property in ways that would bring jobs and other economic, educational and environmental benefits to the area.

The Army does not decide how the land will be used in the future. These decisions are made by the Fort Ord Reuse Authority (FORA). FORA was established in 1994 by the California State Legislature to make decisions about future uses of Fort Ord land. The Fort Ord Reuse Authority's Board of Directors is made up of representatives from local governments, including Monterey County (3), the Cities of Marina and Seaside (2 each), and one representative each from Carmel, Del Rey Oaks, Sand City, Monterey, Pacific Grove and Salinas. The Board also includes ex-officio members such as federal and state elected officials from the area, and representatives from some of the major future users of the property such as California State University Monterey Bay, Monterey-Salinas Transit, and others.

In 1997, the Fort Ord Reuse Authority approved an overall plan, called the Base Reuse Plan, and the environmental documents needed to support that plan. This plan was developed after an extensive public process, during which the public had numerous opportunities to provide comments.

After completing the cleanup and before transfer, the Army, in consultation with the two environmental regulatory agencies, will place additional restrictions on land uses to protect public safety. This could limit the purposes for which the land can be used.

The primary purpose of cleanup at the high priority sites is not economic development—the land will largely remain in natural habitat—but protection of public safety. In the judgment of the Army and the regulatory agencies, these lands are just too dangerous and too close to residences and schools to allow a situation to continue where there is unexploded ordnance and explosives laying on the ground that could be set off by anyone who trespasses on this land.

The chart below indicates how each of the high priority sites would be used under the Fort Ord Reuse Authority Plan:

Capsule Summary

- Decisions about future land use are not made by the Army but by the Fort Ord Reuse Authority whose board is made up of officials from all the local governments.
- ▶ The Fort Ord Reuse Authority Base Reuse Plan was approved after an extensive public process with numerous opportunities for public participation.
- ▶ The land that had been identified as high priority for cleanup will largely remain in natural habitat—the primary purpose of cleanup at the high priority sites is protection of public safety, not economic development.
- ▶ Before the land can be transferred, the agencies will assess whether the cleanup has been sufficiently successful that it will be safe to use the land for the intended purposes.

The text provides more detailed information on these summary topics.

Future Land Uses — FORA Plan

Area	Future Land Use Based on Fort Ord Reuse Authority Plan
Ranges 43-48	85% percent of the land will be transferred to the U.S. Bureau of Land Management to be managed as a natural resource management area, with uses including recreation. The remaining 15% will be transferred to the Fort Ord Reuse Authority for the City of Seaside and Monterey County.
OE-16	This land will be transferred to the U.S. Bureau of Land Management to be managed as a natural resource management area, with uses including recreation.
Range 30A	This land will be transferred to the U.S. Bureau of Land Management to be managed as a natural resource management area, with uses including recreation.
Seaside 1-4	This land will be transferred to the Fort Ord Reuse Authority for the City of Seaside, for mixed-use development.
Parker Flats	This land will be transferred to the Fort Ord Reuse Authority for Monterey County, for mixed-use development.
York School	This land will be transferred to the Fort Ord Reuse Authority for York School, for educational purposes.

Criteria For Vegetation Clearance Alternatives

The fundamental purpose of vegetation clearance is to clear brush so cleanup workers can safely enter the ranges to remove unexploded ordnance and explosives. The following four criteria are used as the basis for evaluating the alternative vegetation clearance methods:

- ▶ Workers clearing the vegetation are not in danger of accidentally setting off ordnance and explosives.
- ▶ The public is protected from unreasonable safety and health risks during vegetation clearance.
- ▶ Ordnance and explosives cleanup specialists are able to see the ground after the brush is cleared, reducing the risk of accidentally setting off ordnance or explosives during cleanup.
- ▶ The habitat (particularly maritime chaparral) will fully recover after the vegetation clearance and ordnance and explosives removal action. [The Army is required to monitor the habitat for 5 consecutive years following the cleanup to ensure a healthy recovery.]



This photo gives you an example of the dense vegetation on the former Fort Ord.

What Vegetation Clearance Alternatives Are Being Considered?

Below is a synopsis of the vegetation clearance alternatives being considered.

Manual Methods

Workers would enter the ranges and cut the vegetation using chain saws, loppers, power chippers, movers and powered weed cutters. Vegetation would be cut off at six-inches above the ground, to reduce the risk of accidentally setting off unexploded ordnance or explosives. The vegetation that is cut would be chipped or mulched at the site.

Manually Operated Mechanical Methods

Workers can operate a number of machines to clear vegetation. These machines are known as the Brush Hog, Hydro-Ax, Trackless Land Clearance machines, modified Bobcat, Tractorassisted Chipping Device ("Brontosaurus" and "Taz") and Track Hoes. In all cases, these machines are operated by workers who would drive or accompany the machine onto the land. Vegetation would be cut off at the six-inch level to reduce the risk of setting off unexploded ordnance or explosives. The cuttings would fall to the ground.

Remotely Operated Mechanical Methods

Workers would remain outside the area operating machines—similar to those mentioned above—by remote control. The machines would cut the vegetation off close to the ground, leaving the cuttings on the site.

Grazing Methods

The Pebble Beach Company has successfully used goats to reduce vegetation in Monterey Pine Forests on the Monterey Peninsula. The goats were used to reduce the amount of material that could catch fire in the event of an accidental or wild fire. This method requires confining goats to a small area (1-5 acres) until the vegetation on the area is reduced, then the goats must be moved to the next small area. The approximate density of goats required is 350 goats per acre. A goat herder has to set up and move the temporary electric fence used to confine the goats to a single area, and must have access to the goats. Also, water must be trucked to the area where the goats are located on a daily basis, and portable generators are used to supply power to the electric fence.

Herbicides

Herbicides would be used to kill the plants and remove the leaves, which would fall to the ground. Herbicides would be applied from the air.

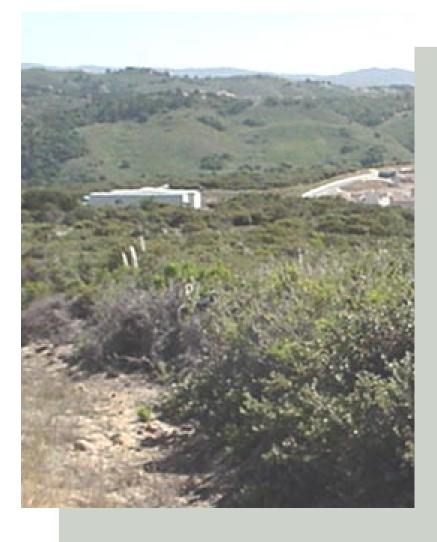
Prescribed Burns

A carefully-planned, controlled burn would be conducted to clear the vegetation to bare ground.

No Action

The "no action" alternative would require permanent fences and warning signs around the area, but would leave the unexploded ordnance and explosives on the ground.

The agencies are currently evaluating the effectiveness of the alternatives and the results will be presented in the Interim Action Remedial Investigation/Feasibility Study and summarized in Community Bulletin #2. The results of these studies will also be discussed in the second Symposium to be held in November 2001.



Residences in proximity to the Multi-Range Area.

What Are The Health And Safety Risks?

Cleanup of the sites will reduce the health and safety risks that children and other trespassers could detonate ordnance and explosives by going in these areas. But there is considerable controversy about safety and health risks if prescribed burns are chosen as the method for vegetation clearance.

Opponents to prescribed burns have identified three risks:

- ▶ They believe prescribed burns could get out of control and spread to areas outside of Fort Ord.
- ▶ Some people who live "downwind" of Fort Ord have respiratory problems and are concerned that the smoke from prescribed burns at Fort Ord will adversely affect their health, or the health of children or the elderly who could be at greater risk from the smoke.
- Fires will inevitably set off some unexploded ordnance and explosives, and some people fear this means that smoke from the fire will contain harmful concentrations of chemicals not found in smoke from other prescribed burns.

This bulletin won't attempt to answer all these concerns in depth. Bulletin #2 will provide much more information about how the

fire would be conducted—if it is conducted—and any health risks associated with burns. One reason for the delay in answering some of these questions is that additional studies are currently underway.

Here is some basic information:

Fire Risk

In 1997, a prescribed burn conducted by the Army jumped fire lines and burned more acreage than what was planned. Following that burn the Army met with numerous local, state and federal fire fighting agencies to determine what went wrong and to identify measures to reduce the chance of future burns getting out of control. The Army conducted four burns in 1998 using the enhanced procedures and all of the burns were successfully controlled.

The Army and the U.S. Navy Fire Department (which handles fire fighting at Fort Ord) believe that all possible measures to control the fires have been incorporated into the Army's program. A special team of highly experienced veteran fire and smoke management professionals has been assembled to study and plan for a safe burning operation to eliminate the risk and mistakes of the past. To give you an idea of the magnitude of precautions incorporated into the burn program, the Army's cost to conduct prescribed burns has risen from \$5 per

acre in 1997 to over \$900 per acre now. The Army and the U.S. Navy Fire Department have asked the California Department of Forestry, the Bureau of Land Management, and several local fire departments to review the adequacy of the plans. These protective measures will be presented in Bulletin #2 and Symposium #2.

Actually, several agencies would argue that the greater risk is to put off prescribed burns. One of the benefits of prescribed burns is to reduce the amount of brush that serves as fuel for a wildfire. When there are no smaller burns, there is a buildup of brush. If there was an accidental or naturally occurring fire, the buildup of fuel could create a much bigger fire that would be harder for fire fighters to handle—particularly since fire fighters couldn't enter the land because of the unexploded ordnance and explosives. The risk to surrounding property would be much greater (see photo above). Anyone who had health problems from smaller prescribed burns would have even greater problems with a bigger fire. Most fire fighting agencies think this type of uncontrolled fire will happen if there are no periodic prescribed burns. But, of course, nobody knows whether this fire will occur one year, 10 years, or 100 years from now. When it does occur, the risk to life, public health and safety will be much greater than the risk from prescribed burning.

Health Effects From Smoke

Prescribed burns are a normal thing in Monterey County, as they play a key role in habitat and fuel management for a number of agencies, local, state and federal. As recently as December 2000 there was a prescribed burn of 1000 acres in Monterey County that caused little public concern.

At the same time, exposure to smoke is not good for people. Even limited exposure can create problems for people with respiratory problems, such as asthma, that could be aggravated when air quality is bad or they are exposed to smoke. Firemen, working to control fires, may be exposed to poison oak oil in the smoke. Historically this has not been a problem for nearby residents.

Some opponents to prescribed burns at Fort Ord believe there are special risks to fires on lands where there is unexploded ordnance and explosives. They believe that fires could cause unexploded ordnance and explosives to detonate, putting chemicals they fear pose risks to human health into the air, soil or vegetation. Some unexploded ordnance and explosives would detonate during prescribed burns and wildfires at Fort Ord.

The question is whether these incidental detonations, or the burning of the ordnance itself, makes the smoke from prescribed burns at Fort Ord more toxic or harmful than smoke from other prescribed burns conducted throughout the county every year. Previously the Army conducted studies to identify the

emissions produced from ordnance and explosives that may detonate during prescribed burns and concluded that these emissions do not pose a health threat to the community. The U.S. Environmental Protection Agency examined the studies and concluded that the studies were done properly, using the best available information.

Some critics argued that these studies should not be applied to Fort Ord because the studies didn't use information from Fort Ord. Previous studies of chemicals released into the air by fires on lands with unexploded ordnance and explosives have considered a generic mix of ordnance and explosives.

Recently, toxicologists from the Army, in consultation with EPA and DTSC, studied how large the emissions from ordnance and explosives set off during a burn might be, taking into account the specific types of unexploded ordnance and explosives found at Ranges 43-48. Ranges 43-48 were selected as the focus of the study because the explosives at this site are the most dangerous. Emissions at all other sites would be lower.

The scientists' preliminary conclusion is that the emissions from burning of ordnance and explosives are so small that the health risks from a fire at Ranges 43-48 are no greater than if the same vegetation were burned at a site where there was no ordnance or explosives. The toxicologists are finalizing their report, and it will be summarized in Community Bulletin #2 and in a summary of the study, written in everyday language, that will also be made available to the public.

If the Army does eventually perform a prescribed burn on the high priority cleanup areas, it will use this burn as an opportunity to gather measurements of constituents in the air during the burns. This will provide site-specific results that can be used in making decisions about future burns on other lands with unexploded ordnance and explosives.

The Army has decided that it will offer anyone who could be affected by smoke an opportunity to temporarily relocate out of the affected area, at the Army's expense, during any prescribed burn. Typically a burn will last one day, but smoke could be in the air for two to three days depending on wind conditions. The Army has also set up mechanisms to notify the community in advance if and when a prescribed burn occurs.

There's plenty still to come. In the meantime, we invite you to attend Symposium #1 to discuss the vegetation clearance problem and the alternatives. A registration form is provided on page 14. Keep in mind that these are educational forums. Public comment meetings will occur next year, after all the information is in, but before the decision is made about how vegetation clearance will be done.

For more information, or directions to Symposium #1, contact Mr. Lyle Shurtleff at: 831-393-9691 or check our website at www.FortOrdCleanup.com.

Put Your Name On Our Mailing List

To receive future information about Fort Ord cleanup plans and activities, please clip and return this coupon to Community Relations Office, Environmental and Natural Resources Management, P.O. Box 5004, Presidio of Monterey, CA 93944-5004, or fax to 831-393-9188. You can also contact us via email at: cqc@redshift.com to be placed on the community relations mailing list.

please print or type)				
Name:				
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Special interests	Croundwater Contemination	☐ Ordnance and Explosives Cleanup	☐ Habitat Processation	Droporty Transfer
speciai interests:		::		☐ Property Transfer

Additional Information About The Cleanup Of Fort Ord

The Army is responsible for ensuring cleanup of the former Fort Ord, but it must do so in a manner that complies with federal and state laws and under the supervision of federal and state environmental regulatory agencies. At Fort Ord, the cleanup is supervised by the U.S. Environmental Protection Agency (EPA), the California Department of Toxic Substances Control (DTSC), and the Regional Water Quality Control Board (RWQCB).

To expedite cleanup at Fort Ord, the three regulatory agencies signed an agreement with the Army about how the agencies would manage the program and the manner in which any disagreements would be settled. Under this agreement, each agency has assigned a representative to a Base Cleanup Team (BCT). This team makes the day-to-day management decisions about the cleanup program. When there are disagreements between the agencies, policy-level managers from each of the agencies meet to resolve differences.

These three regulatory agencies, whose job it is to protect public health and safety, are intimately involved with virtually all of the cleanup decision making at the site. Contacts for each of the participating agencies in Fort Ord's cleanup are listed below.

United States Environmental Protection Agency		United States Army—Presidio of Monterey		
John Chesnutt BCT Member 415-744-2324	Viola Cooper Community Involvement Coordinator 415-744-2188	Gail Youngblood BCT Member 831-242-7924	Kevin Siemann Ordnance & Explosive Program Manager 831-242-7919	
California D epartn	800-231-3075 nent of Toxic Substances Control	Lyle Shurtleff Community Relations 831-393-9691	Melissa Hlebasko Community Relations Program Coordinator 831-393-1284	
Rizgar Ghazi BCT Member 916-255-3610	Linda Janssen Public Participation Specialist 916-255-6683	Fort Ord F	800-852-9699 Reuse Authority	
		831-	883-3672	
	al Water Quality Control Board	Informatio	on Repositories	
Grant Himebaugh BCT Member 805-542-4636		 Fort Ord Administrative Record Seaside Library Ord Military Community Library California State University, Monterey Bay Library 		
Fort Ord Cleanup Website www.FortOrdCleanup.com		For assistance in finding information of interest to you please contact		
		Tina Fischl at: 831-393-9186 or write to Community Relations, P.O. Box 5004, Presidio of Monterey, CA 93944-5004		

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(Please complete and return the registration form to secure your attendance at the Symposium)

Symposium #1 Registration Form

Please register me to attend Symposium #1 on September 19, 2001 at 1:00 p.m. at the Steinbeck Forum, Monterey Conference Center. I understand there is no cost to attend the forum.

Name	
Address	
City/State/Zip	
Phone	
Organization (if any)	
Γitle (if any)	

Return your completed registration form to: Community Relations Office, Environmental and Natural Resources Management, P.O. Box 5004, Presidio of Monterey, CA 93944-5004 or fax to 831-393-9188

A Summary of What You'll Find Inside...

- ▶ When Central Maritime Chaparral is cleared by fire, it is actually good for the natural habitat. When it is cleared by hand or mechanical means, this rare habitat doesn't fully recover
- ▶ The Army has identified more than 8,000 acres of land covered by maritime chaparral (a rare habitat) where they may be unexploded ordnance and explosives that must be cleaned up.
- ▶ Approximately 85% of the worldwide distribution of several rare and endangered plants that exist only in Central Maritime Chaparral habitat is on the former Fort Ord. As a result, this land is overseen by the U.S. Fish & Wildlife Service, the federal agency responsible by law for protecting rare and endangered species.
- ▶ Since 1997, the Army and Fish & Wildlife Service have had an agreement to use prescribed burns as the primary method for brush clearance on lands designated as habitat reserves and containing Central Maritime Chaparral.
- ▶ To remain in compliance with the Habitat Management Plan, the Army and the Fish & Wildlife Service have agreed that, until the prescribed burn issue is resolved, no further cutting of Central Maritime Chaparral habitat will occur without Fish & Wildlife Service approval and no additional land transfers to the community (other than those already agreed upon) will be permitted.
- ▶ Some nearby residents with respiratory conditions and other concerns oppose the use of prescribed burns and fear that smoke from Fort Ord will contain dangerous chemicals.
- ▶ Decisions about future land use are not made by the Army, but by the Fort Ord Reuse Authority whose board is made up of officials from all the local governments.
- ▶ The Fort Ord Reuse Authority Base Reuse Plan was approved after an extensive public process with numerous opportunities for public participation.
- ▶ The land that had been identified as high priority for cleanup will largely remain in natural habitat—the primary purpose of cleanup at the high priority sites is protection of public safety, not economic development.
- ▶ Before the land can be transferred, the agencies will assess whether the cleanup has been sufficiently successful that it will be safe to use the land for the intended purposes.

Un Resumen de lo Que Hallará en la Interior...

- ▶ El Ejército preparará una investigación para tomar acciones correctivas provisorias/estudio de factibilidad (IA RI/FS) concentrándose en los lugares de mayor prioridad para la limpieza. El Ejército considerará incendios autorizados como una de las opciones para eliminar la maleza, particularmente en los terrenos donde puede resultar peligroso eliminar la vegetación por otros medios.
- ▶ La decisión con respecto a los métodos de limpieza de la vegetación que se utilizarán será anunciada en un Acta de Resolución (ROD) que será firmada por el Ejército, la Agencia de Protección Ambiental de Estados Unidos, y el Departamento de Control de Substancias Tóxicas de California. Se prevé que el Acta de Resolución estará terminada y se firmará a mediados/fines de 2002.
- ▶ Algunos residentes de los alrededores con afecciones respiratorias y de otro tipo se oponen a los incendios autorizados y temen que el humo contenga sustancias químicas peligrosas.
- ▶ Cuando se realiza la limpieza de *Central Maritime Chaparral* por medio de incendios, es en realidad bueno para el hábitat natural. Cuando la limpieza se lleva a cabo por medio de métodos manuales o mecánicos, este hábitat exótico no se recupera totalmente.
- ▶ El Ejército ha identificado más de 8.000 acres de tierra cubierta por chaparral marítimo (un hábitat exótico) donde pueden encontrarse artillería y explosivos sin detonar que deben eliminarse.
- Aproximadamente el 85% de la distribución mundial de varias plantas exóticas y en peligro de extinción que existen únicamente en el hábitat de *Central Maritime Chaparral* está en el antiguo *Fort Ord.* Como resultado de ello, esta tierra está controlada por el *U.S. Fish & Wildlife Service* (Servicio de Fauna Marina de Estados Unidos), la agencia federal legalmente responsable de proteger las especies exóticas y en peligro de extinción.
- ▶ Desde 1997, el Ejército y el *Fish & Wildlife Service* han tenido un acuerdo de utilizar los incendios autorizados como el método principal para la limpieza de maleza en tierras identificadas como reservas naturales y que contienen chaparral marítimo.
- ▶ Para cumplir con el Plan de Preservación del Hábitat, el Ejército y el Fish ॐ Wildlife Service han acordado que hasta que no se resuelva la cuestión de los incendios autorizados, no se realizará más poda del hábitat de Central Maritime Chaparral sin la autorización del Fish ॐ Wildlife Service y no se permitirá la transferencia de más tierras a la comunidad (con excepción de las que ya fueron transferidas).
- Las decisiones sobre el uso futuro de tierras no serán tomadas por el Ejército, sino por la *Fort Ord Reuse Authority* (Autoridad de Reutilización del Fort Ord) cuyo directorio está formado por funcionarios de todos los gobiernos locales.
- ▶ El Plan de Reutilización Básica de la Autoridad de Reutilización de Fort Ord fue aprobado después de un minucioso proceso público que ofreció innumerables oportunidades para la participación pública.
- La tierra que había sido identificada como de alta prioridad para la limpieza permanecerá en gran parte como hábitat natural—el propósito principal de la limpieza en los lugares de alta prioridad es la protección de la seguridad pública y no el desarrollo económico.
- ▶ Antes de que la tierra pueda ser transferida, las agencias evaluarán si la limpieza ha sido lo suficientemente exitosa como para que no constituya ningún peligro utilizar la tierra para los propósitos correspondientes.

A Summary of What You'll Find Inside...

- ▶ The former Fort Ord includes areas where unexploded ordnance and explosives remain on the land, left over from when Fort Ord was used for training soldiers.
- ▶ The Army must clean up these areas and remove the explosive threats before the land can be safely reused by the community.
- ▶ The highest priority for cleanup are parcels known as Ranges 43-48, OE-16, Range 30A, several former firing ranges adjoining Seaside, York School, and the area known as Parker Flats.
- ▶ Thick stands of brush make it difficult to see any unexploded ordnance on the ground. The Army explosive safety experts have concluded that it is unsafe to try to remove the high explosive items on these ranges until the brush is removed.
- ▶ In the past the Army removed brush using prescribed burns, but the Army voluntarily stopped burning in 1998 to address concerns raised by the regulatory agencies and community members.
- ▶ The Army hoped to begin vegetation clearance on the high priority sites in 2001, but as a result of the recent court decision, the Army will need to prepare more detailed studies that won't be completed until early in 2002.
- ▶ The Army will prepare an Interim Action Remedial Investigation/ Feasibility Study focusing on those sites that have the highest priority for cleanup. The Army will consider prescribed burns as one of the vegetation clearance options, particularly on those lands where it may not be safe to remove vegetation by other means.
- ▶ The decision regarding which vegetation clearance methods will be used will be announced in a Record of Decision that will be signed by the Army, the U.S. Environmental Protection Agency, and the California Department of Toxic Substances Control. The Record of Decision is planned for completion in mid/late 2002.

Continued on inside back cover (page 15)

Un Resumen de lo Que Hallará en la Interior...

- ▶ El antiguo *Fort Ord* (Fuerte Ord) incluye áreas donde artillería o explosivos sin detonar permanecen en el terreno, que han quedado de la época cuando *Fort Ord* se usaba para entrenamiento militar.
- ▶ El Ejército debe limpiar estas áreas y eliminar las amenazas de explosivos antes de que el terreno pueda ser reutilizado, de una manera segura, por la comunidad.
- Las parcelas, cuya limpieza es prioritaria, son las parcelas conocidas como Ranges 43 (Campo 43), OE-16, Range 30A (Campo 30A), varios antiguos campos de tiro que lindan con los campos de playa (conocidos como Seaside 1-4 (Playa 1-4), y el área conocida como Parker Flats.
- ▶ Una tupida maleza hace difícil ver la artillería sin detonar en el terreno. Los expertos en explosivos del ejército han llegado a la conclusión de que es peligroso tratar de eliminar los elementos altamente explosivos en estos campos hasta que la maleza no haya sido extraída.
- ▶ En el pasado el Ejército eliminó todas las malezas mediante incendios autorizados, pero el Ejército voluntariamente detuvo esta práctica en 1998 para poner fin a las protestas por parte de agencias de regulación y miembros de la comunidad.
- ▶ El Ejército esperaba comenzar con la limpieza de la vegetación en los lugares con más alta prioridad en 2001, pero como resultado de una decisión judicial reciente, el Ejército necesitará preparar estudios más detallados que no se completarán hasta principios de 2002.

Para obtener una copia completa del boletin de la comunidad #1, contacte (800) 852-9699.

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